```
MDQSSRRDESYHETHPGSLDPSHQSHPHPHPHPTLHRPNQGGVYYDSPQH   50
GMPQQPYQQHGGFHQQNELQHLREFSDSHDNAFSHHSYQQDRAGVSTLPN  100
NISHAYGGSHPLAESQHSGGPQSGPRIDPNNHPHQDDPHRPSEPLSHPSS  150
TGSHQGTTHQQYHERSHHLNPQQNRDHADTISYRSSTRFYRSHAPPSRQE  200
RPHLHADHHNEGHHAHSHHGEHPHHKEQRHYHGDHMHHHIHHRSPSASQL  250
SHKSHSTLATSPSHVGSKSTASGARYTFGARSQIFGKAQSRESLRESASL  300
SEGEDHVQKRKKAQRAHKKAHTGNIFQLLWEKISHLLLGLQQMILSLTQS  350
                    S1                        S2
LGFETFIFIVVCLNTVILVAQTFTELEIRGEWYFMVLDSIFLSIYVLEAV  400
                              S3
LKLIALGLEYFYDPWNNLDFFIMVMAVLDFVLLQINSLSYSFYNHSLFRI  450
                    S4                        S5
LKVFKSMRALRAIRVLRRLSILTSLHEVAGTLSGSLPSITALTLMFTCL  500
                                        P
FLFSVVLRALFQDSDPKRFQNIFTTLFTLFTMLTLDDWSLLYIDNRAQGA  550
                         S6
WYIIFILMIYIVIQYFIFLNLVIAVLVDNFQMALLKGLEKVKLEQAARVH  600
EKLLDDSLTDLNKADANAQMTEEALKMQLIEGMFGNMTVKQRVLHFQFLQ  650
LVAAVEQHQQKFRSQAYVIDELVDMAFEAGDDDYGK                686
```

FIG. 1A

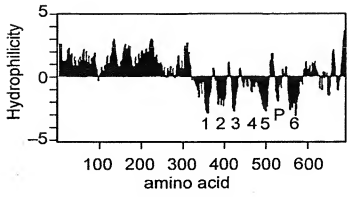

FIG. 1B

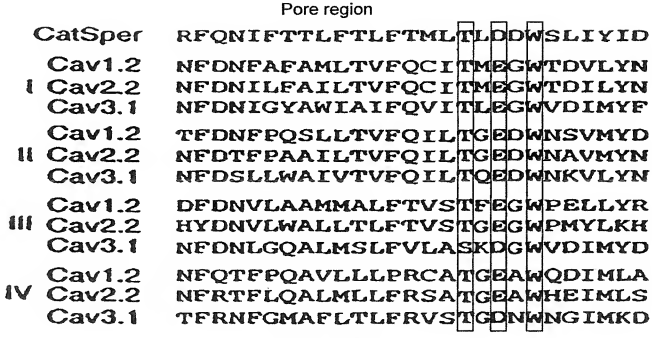

FIG. 1C

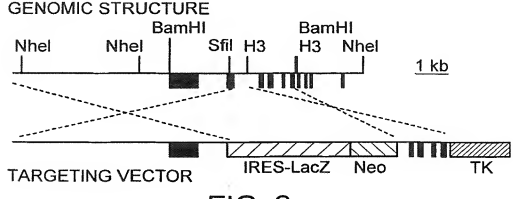

FIG. 2

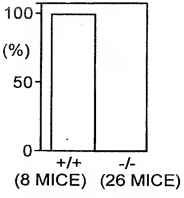

FIG. 3A

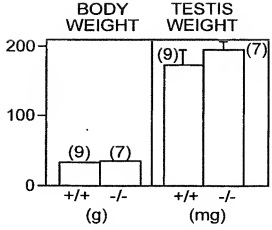

FIG. 3B

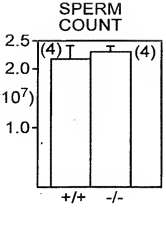

FIG. 3C

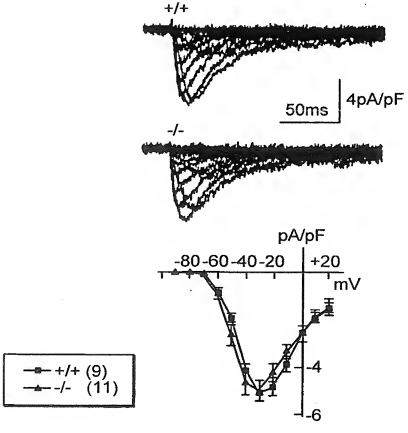

FIG. 3D

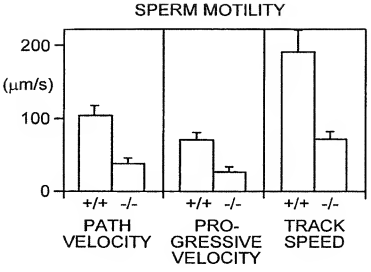
SPERM MOTILITY
200
(μm/s)
100
0
+/+ -/-
+/+ -/-
+/+ -/-
PATH VELOCITY
PRO-GRESSIVE VELOCITY
TRACK SPEED

FIG. 4A

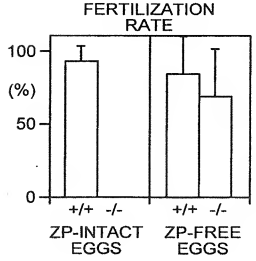
FERTILIZATION RATE
100
(%)
50
0
+/+ -/-
+/+ -/-
ZP-INTACT EGGS
ZP-FREE EGGS

FIG. 4B

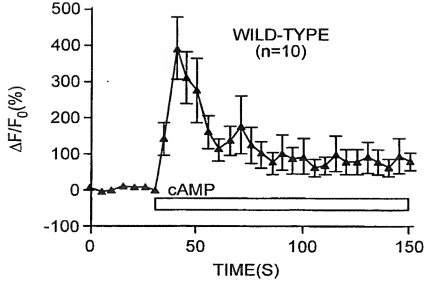

FIG. 5A-1

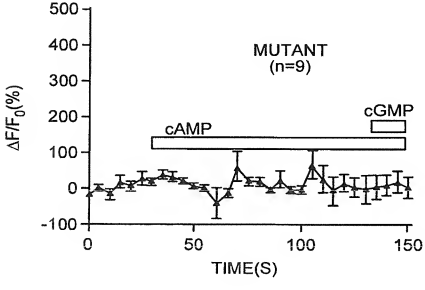

FIG. 5A-2

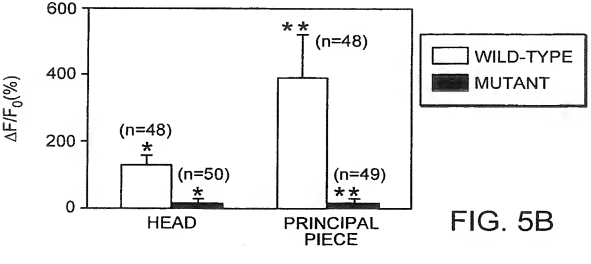

FIG. 5B